

# **CHAPTER 1 - NCLB REQUIREMENTS**

## **Background Information**

The NCLB Act (Public Law 107-110) was a six year reauthorization of the Elementary and Secondary Education Act (ESEA). ESEA was first passed by Congress in 1965 with the latest prior reauthorization occurring in 1994 with the passage of the Improving America's Schools Act (IASA). The NCLB Act contained four basic reform principles:

1. Stronger accountability for results via assessments(testing)
2. Increased flexibility and local control
3. Expanded options, choices and alternatives for parents
4. Emphasis on teaching methods that have been proven to work

The NCLB funds are targeted into the following categories:

- ? Title I: Improving the Academic Achievement of the Disadvantaged
- ? Title II: Preparing, Training and Recruiting Highly Qualified Teachers and Principals
- ? Title III: Language Instruction for Limited English Proficient and Immigrant Students
- ? Title IV: 21<sup>st</sup> Century Schools – Safe and Drug Free Schools and Communities, 21<sup>st</sup> Century Community learning Centers
- ? Title V: Promoting Informed Parental Choice and Innovative Programs
- ? Title VI: Flexibility and Accountability

## ***ESEA- IASA -1994***

The prior ESEA, IASA Act:

- ? Required tests (assessments) in three grade spans (3-5, 6-9, and 10-12) in reading and math.
- ? Focused on improving the proficiency of children served by Title I programs. Now all children must progress as measured against academic content standards.
- ? Did not require a science assessment.
- ? Did not contain any of the mandates and sanctions now required for under performing Title I schools and Local Education Agencies (LEA).

The initial plans for NCLB were sent to Congress on January 23, 2001. At that time, only 11 states were in compliance with the 1994 ESEA requirements. President George W. Bush signed NCLB into law on January 8, 2002

Under the 1994 reauthorization, each state was supposed to develop comprehensive academic standards with curriculum-based tests that would be administered annually at three grade levels, in both reading and math. By the time the 1994 reauthorization was superseded by NCLB in 2002, only 21 states were in compliance with its accountability provisions.

The following table compares the requirements of the prior law with NCLB.

**Table 2.1: Comparison of Key NCLB Accountability Requirements with South Dakota's Pre-NCLB Requirements**

<b>NCLB Requirements</b>	<b>IASA Requirement</b>	<b>Comparison with South Dakota's NCLB System as of January 2002</b>
<b>Statewide, grade-specific content standards</b> in reading, math, and science.	Standards in reading and math. State discretion to have grade level expectations or standards at benchmark grades. SD developed standards for Language Arts (including Reading), Math, Science, and Social Studies for grades K - 12.	Standards for reading, math, and science and grade level expectations for each grade 3 through 8 and 11. SD has revised its K - 12 reading, language arts, and math standards and is in the process of revising the science standards.
<b>Reading and math assessments</b> in grades 3, 4, 5, 6, 7, and 8, and once in high school.	Assessments in reading and math once in each grade span: 3-5, 6-9, 10-12. SD gave the SAT9 in grades 2, 4, 8, and 11.	State assessments aligned with state academic standards in reading and math, for grades 3, 4, 5, 6, 7, 8, and once in grades 10-12 by the 2005-06 school year. SD provided Dakota STEP (augmented SAT10) for grades 3-8 and 11 during the 2002-03 school year.
<b>Science assessments</b> administered once in each of three grade spans (3-5, 6-9, and 10-12).	No federal requirement. SD provided the SAT9 for science in grades 2, 4, 8, and 11.	SD will be aligning the SAT10 science assessment to the revised science standards and augment the test as necessary. This will be completed by the spring 2006 administration of the Dakota STEP. NCLB requires science assessment to be given once in each grade span (3-5), (6-9), (10-12). The SAT 10 is currently given at each grade 3-8 and 11.
<b>Assessments of English proficiency</b> in reading, writing, listening, and speaking.	No requirements.	SD provides the SELP test for LEP students on an annual basis. This test covers all 4 domains but will be augmented to align to the newly developed ELP standards.
<b>Determinations of "adequate yearly progress" (AYP)</b> for each school and school district—based on (1) overall performance and the performance of student subgroups, (2) measures of proficiency, test participation, attendance, and graduation.	Requirement for accountability system for Title I schools only. SD definition of AYP under IASA = 5% growth in reading or math each year for grades 4, 8, and 11.	Accountability system applies to all public schools and districts. 1) AYP is measured for reading and math separately by comparing the subgroup, school, and district score (% students scoring proficient or advanced on the Dakota STEP test) to the established target. 2) The all student group and each subgroup must have at least 95% participation in the state test. High schools must have a 90% graduation rate or make progress on the measure while elementary and middle schools need a 94% attendance rate or make progress.

“ <b>Report cards</b> ” on school and district performance and disseminate to parents and the public.	State, district, and school assessment results, including disaggregated subgroups, reported as profiles. AYP for all Title I schools was reported as well as those schools identified for improvement status.	The NCLB Report Card is designed to report state, district, and school level accountability and assessment information in the aggregate and disaggregated for each student subgroup. Each report must compare the actual achievement to the target, % students not tested, two-year trend data, and graduation and attendance rates. AYP status for each school and district must be reported as well as the names and numbers of those identified for improvement status. The % teachers meeting qualifications, number of classes not taught by highly qualified teachers, in the aggregate and disaggregated by poverty level of the school.
<b>Sanctions</b> for low-performing schools (school choice, supplemental education services, corrective actions, and restructuring).	Sanctions for Title I schools included identification, public notification and writing a school improvement plan.	Identification, public notification, and writing a school improvement plan constitute the sanctions for all public schools and districts. Title I schools must also offer choice, supplemental services, be subject to corrective actions applied by the district, and undergo restructuring planning and alternative governance established by the district if AYP continues to be missed. Title I districts that continue to fail to make AYP will be subject to corrective actions applied by the state.
“ <b>Highly qualified</b> ” teachers in core academic subjects by the 2005-06 school year (See Appendix A).	Title I teachers were to be certified in the content areas teaching.	All public school teachers of core academic subjects must be highly qualified by the end of the 2005-06 school year. Teachers new to the profession must be certified to teach the classes assigned and pass a test in order to meet the requirements. Existing teachers must also be certified in all subjects teaching and have three years of experience as defined under SD H.O.U.S.S.E. rules. Title I teachers must be highly qualified before hire.
<b>Title I paraprofessionals</b> meet NCLB-specified qualifications by January 2006 (See Appendix B).	Paraprofessionals were to have at least a high school diploma or GED.	Title I paraprofessionals must have a high school diploma or GED and pass the ParaPro test, have completed 48 credits at an approved institution of higher education, or have at least an Associate degree.
Source: SDDOE		

### *NCLB- Purpose*

The NCLB Act set ambitious goals in an attempt to close the achievement gaps between the various student subgroups.

The purpose of NCLB as specified in the Act is to ensure that all children have a fair, equal, and significant opportunity to obtain a high-quality education and reach, at a minimum, proficiency on challenging state academic achievement standards and state academic assessments.”

The NCLB Act (Public Law 107-110) is a large document consisting of 670 pages. The main component of the act is Title I, Part A, which funds educational services for disadvantaged students. Title I, Part A, accounts for approximately 29.2% of the funding expended by SD under the NCLB Act and 52.9% of all funding expended if Impact Aid is excluded. Title I, Part A established the key accountability requirements to help ensure all students become proficient.

Therefore, the focus of our review concentrated on Title I, Part A. While the remaining titles contain significant amounts of federal funding, the new requirements do not have near the impact as those created in Title I, Part A.

### *Additional Requirements*

Resources provided under NCLB are to help improve instruction in high-poverty schools and ensure that poor and minority children have the same opportunity as other children to meet challenging State academic standards. The main highlights of the new reauthorization were:

- ? States were required to develop content standards in reading and math and develop assessments linked to those standards for all students in grades 3-8 by 2005-2006 and science by 2007-2008.
- ? States were required to plan a single, statewide accountability system that tracks each school district's and school's progress toward 100 percent proficiency.
- ? States were required to prepare an annual report card on each school's, each LEA's, and the State's progress in meeting the AYP objectives with all children being proficient by 2013-2014.
- ? Imposes specific sanctions on schools, LEA's and the state for not meeting established AYP objectives for two consecutive years.
- ? Sets annual measurable objectives concerning the provision of "high-quality" professional development for teachers.
- ? Implement activities to involve parents in programs funded by Title I, Part A.

### **Implementing NCLB in South Dakota**

SD did not have a statewide school and district accountability system that encompassed all students. During the 2003 Legislative session, statutory changes were made to implement a single statewide accountability system. The statutory changes can be found in SDCL 13-3-62 to 13-3-69. The statutory changes put in place the necessary framework to implement the various mandates of the NCLB Act. In addition, administrative rules were promulgated (ARSD 24-42) to further implement the various requirements. While all schools are included in the accountability system, only schools that receive Title I funding are subject to the improvement requirements and sanctions of NCLB.

Each NCLB requirement along with what SD has done or will be doing to comply with these requirements is laid out in detail in the South Dakota Department of Education State Application Accountability Workbook, dated August 7, 2004. This document can be found at [http://www.state.sd.us/deca/NCLB/word/Workbook\\_9\\_3\\_04.doc](http://www.state.sd.us/deca/NCLB/word/Workbook_9_3_04.doc). Please refer to this document for greater detail on the specifics on any particular area or requirement.

The State's assessment tool is the Dakota STEP examination. Harcourt Educational Measurement (now known as Harcourt Assessments) is the company that creates, publishes, and sells the SAT tests. The Harcourt's SAT10 test was augmented with additional questions aligned with the core content standards of SD in reading and math to create what is the Dakota STEP test. The State of South Dakota contracted with Harcourt to use the SAT10/Dakota Step as our assessment tool. The Dakota STEP is administered to every student enrolled in grades 3-8 and 11. An alternate assessment is available for students with disabilities whose IEP (Individual Education Plan) so specifies.

Harcourt developed the tests, publishes, mails, scores and sends results via a compact disc to the South Dakota Department of Education (SDDOE). The SDDOE uploads the data into the Student Information Management System (SIMS). A software program developed by School Extra (now known as Infinite Campus), that incorporated the State's Adequate Yearly Progress (AYP) decision rule calculations for each applicable area, then calculates and generates the report cards following the parameters established in the approved South Dakota Accountability Plan. These report cards are available on the SDDOE website.

The SD assessment system has been approved by the USDOE. It took over 3 years to obtain such approval. The Dakota STEP underwent an alignment process conducted by the Buros Institute of the University of Nebraska – Lincoln to assure the assessment would accurately measure achievement of the students based on the core academic standards established for each grade in reading and math.

All public schools and districts are accountable for the performance of student subgroups. Subgroups include major racial/ethnic subgroups, students with disabilities, limited English proficient students, and economically disadvantaged students. SD uses current census definitions for major racial/ethnic groups: White, Black, Asian/Pacific, Hispanic, and Native American. Students with free and reduced lunch status are the basis for determining the subgroup of economically disadvantaged status. Students who score less than proficient on the Limited English Proficiency state test are assigned to the LEP subgroup. Students qualifying for an IEP are categorized in the students with disabilities subgroup.

Definitions of achievement levels have been expressed through performance descriptors. The State of SD has defined four levels of student achievement: advanced, proficient, basic, and below basic. Cut scores for proficiency levels were established in the summer of 2003. The Buros Institute, University of Lincoln, Nebraska, conducted a standards setting process with the SDDOE in establishing achievement levels for reading and math, grades 3-8 and 11.

The State disaggregates test data for all public schools to report the progress of student subgroups and to determine whether or not each subgroup has met or exceeded the State's annual measurable objectives (AMO). AMO's are expressed as a percentage of children in the subgroup that are at the advanced or proficient level in a subject area.

Annual measurable objectives for each grade span and subject area:

	K-8		9-12	
School Year	Reading	Math	Reading	Math
2002-2003	65%	45%	50%	60%
2003-2004	65%	45%	50%	60%
2004-2005	71%	54%	58%	67%
2005-2006	71%	54%	58%	67%
2006-2007	71%	54%	58%	67%
2007-2008	77%	63%	67%	73%
2008-2009	77%	63%	67%	73%
2009-2010	77%	63%	67%	73%
2010-2011	83%	73%	75%	80%
2011-2012	88%	82%	83%	87%
2012-2013	94%	91%	92%	93%
2013-2014	100%	100%	100%	100%

Intermediate goals were established that required schools to increase their minimum performance from the starting point to 100% in five equal intervals, with each increase occurring no more than three years apart. SD will increase the first intermediate goal in 2004-2005, then in 2007-08, 2010-11, 2011-12, 2012-13, and 2013-2014.

#### Intermediate Goals:

	K-8		9-12	
School Year	Reading	Math	Reading	Math
2002-2003	65%	45%	50%	60%
2004-2005	71%	54%	58%	67%
2007-2008	77%	63%	67%	73%
2010-2011	83%	73%	75%	80%
2011-2012	88%	82%	83%	87%
2012-2013	94%	91%	92%	93%
2013-2014	100%	100%	100%	100%

Schools, districts and the state must meet Adequate Yearly Progress (AYP) in reading and math for each subgroup and overall unlike in the past. Also, AYP for another academic indicator (attendance, or graduation rate and participation) now must also be determined for each school. A school / district and each student group will be declared as having met AYP if its performance meets the applicable Annual Measurable Objective (AMO), meets the AMO with a confidence interval, meets the AMO using a 2-year average, or (Safe Harbor) demonstrates substantial improvement consistent with NCLB provisions **and** meets or exceeds a participation rate of at least 95%. The table below shows the 37 categories that each school can be evaluated on to determine whether or not it made AYP.

**Table 2.2: Components of “Adequate Yearly Progress”**

To make “adequate yearly progress” (AYP) under NCLB, students in each school and school district must meet or exceed standards in each of the following applicable categories (marked “X”) NCLB Subgroup									
Criteria for AYP Determination	All Students	White Students	Black Students	American Indian Students	Asian Students	Hispanic Students	Limited-English Students	Special Education Students	Low Income Students <sup>a</sup>
Reading proficiency	X	X	X	X	X	X	X	X	X
Reading participation	X	X	X	X	X	X	X	X	X
Math proficiency	X	X	X	X	X	X	X	X	X
Math participation	X	X	X	X	X	X	X	X	X
Attendance or graduation rate <sup>b</sup>	X								

NOTE: For each of the 36 categories related to test proficiency or participation, adequate yearly progress is computed for the school or school district on the basis of test data aggregated across those grades for which tests are given. For measures of proficiency, AYP determinations are not made for subgroups with fewer than 10 students. For measures of participation, AYP determinations are not made for subgroups with fewer than 10 students.

<sup>a</sup> Low income students are defined as those from families eligible for free or reduced-price meals.

<sup>b</sup> Elementary and middle schools are held accountable for their attendance rates, while high schools are held accountable for their graduation rates.

SOURCE: South Dakota Department of Education, South Dakota Consolidated State Application Accountability Workbook(Pierre, SD: August 27, 2004).

For accountability purposes, the state elected to use a minimum n of 10 students for all subgroups and a confidence interval. The overall confidence interval of  $p = .01$  is applied to the available status score data (i.e., most recent single year or average of two years) to evaluate whether a school has failed to make AYP. The state uses a minimum size (n) of 10 for all subgroups to enable the state's reports to maintain individual student confidentiality, in accordance with federal Family Educational Rights and Privacy Act (FERPA) privacy requirements. The impacts of the confidence interval and the minimum n size will be discussed in greater detail later in this section of the report.

The NCLB has an authorized "Safe Harbor" provision. If in any particular year the school, district, or student group does not meet the AMO, the school, district, or student group may be considered to have made AYP if the percentage of students in that group who did not meet or exceed the proficient level of academic achievement on the State assessments for that year decreased by 10% of that percentage from the preceding public school year; that group made progress on one or more of the State's other academic indicators (graduation and/or attendance rate); and that group had at least 95% participation rate on the statewide assessment. For example, if a subgroup in the current year didn't meet the AMO and had 80 out of 100 children below the advance and proficient levels last year, but this year the number below proficient and advanced was only 72 out of 100 children, then the subgroup would be considered to have met AYP if at least 95% of the children in the subgroup participated in the assessment and progress was made on one or more of the State's other academic indicators like the attendance rate increased. The percentage of children below proficient in the prior year (80%) decreased by 10% (80% time 10% equals 8%) to 72%, therefore that part of safe harbor was achieved.

The other academic indicators, which apply to each school and the student group of all students within the school, are:

- ? Graduation Rate- A school that includes grade 12 will be expected to meet or exceed the State's graduation rate of 90% or show progress.
- ? Attendance Rate - A school that does not enroll students in grade 12 shall have an average daily attendance rate that meets or exceeds the state's minimum attendance rate expectation of 94% or show progress.

Each subgroup in the school must have at least 95% of the students enrolled in the tested grades on the last day of the testing window participate in the state assessments. (Participation Rate) If a subgroup has 40 or fewer students enrolled in the tested grades, then it shall have no more than 2 (two) students not participate in the state assessments.

An LEA's (district) accountability system was exactly the same as the school accountability system for 2003. The district was treated as a single, large school, and scores were calculated for the district exactly the same way as a school's except the other academic indicators of attendance rate and graduation rates did not apply to the district. The SDDOE just completed successful negotiations with the USDOE to amend the way district AYP is determined. AYP for a district is determined on three grade spans: elementary (3-5), middle school (6-8), and high school (9-12). Districts that fail to make AYP for two consecutive years in all three grade spans for the same subject will be identified for improvement status.

All students with disabilities participate in the statewide assessment program either by taking the Dakota STEP with or without accommodations or, for a very small number of students with the most significant cognitive disabilities, by participating in the SD alternate assessment entitled STAARS (Statewide Team-led Alternate Assessment and Reporting System). The number of "proficient" and "advanced" scores based on this alternate achievement standard can not exceed 1.0 percent of all students in the grades tested at the State and district level. Any

scores that exceed the percentage limitation and for whom no exception is granted is counted as non-proficient for accountability purposes.

Test scores of students with disabilities who are assessed using the Dakota STEP will be included in the assessment data for the grade in which the student is enrolled for purposes of calculating adequate yearly progress (AYP).

Once AYP decisions are determined relative to school performance, the results (report cards) are available through portals on a web-based reporting system. AYP status and schools in need of improvement are identified. To be identified as a school in need of improvement, the school would have had to fail to make AYP for two or more years in the same content area (math or reading). Also, it takes two consecutive years of making AYP in the same content area to be removed from the list of schools in need of improvement.

SDDOE sends a letter to each district informing them of each school that did not meet AYP. The district then has the responsibility to report the results to each school, all parents and the community.

Report cards include the following data:

1. Information, in the aggregate, on student achievement at each proficiency level on the State academic assessments (disaggregated by race/ethnicity, gender, disability status, migrant status, English proficiency, and status as economically disadvantaged),.
2. Information that provides a comparison between the actual achievement levels of each student subgroup and the State's annual measurable objectives for each such group of students.
3. The percentage of students not tested (disaggregated by the student subgroups)
4. The most recent 2-year trend in student achievement in each subject area, and for each grade level, for the required assessments.
5. Attendance rates for elementary school students for the school as a whole and disaggregated by student subgroups.
6. Graduation rates for secondary school students disaggregated by student subgroups.
7. Information on the performance of local educational agencies in the State regarding making adequate yearly progress, including the number and names of each school identified for school improvement.
8. The professional qualifications of teachers in the State, the percentage of such teachers teaching with emergency or provisional credentials, and the percentage of classes in the State not taught by highly qualified teachers, in the aggregate and disaggregated by high-poverty compared to low-poverty schools which (for this purpose) means schools in the top quartile of poverty and the bottom quartile of poverty in the State.

If a subgroup of students is less than 10, (n size), the information is not required to be disaggregated and reported.

As mentioned earlier, only those schools that receive Title I funding are subject to school improvement and sanction under NCLB. Prior to NCLB, schools that failed to make AYP for two or more consecutive years were required to prepare improvement plans. There weren't any additional sanctions for persistent failure to make AYP. Under NCLB, a series of increasingly serious consequences are prescribed for underperforming schools or school districts as outlined in the following table.



**Table 2.3: NCLB Requirements for Title I Schools Failing to Make Adequate Yearly Progress**

<i>Requirement/Sanction</i>	Number of Years That the School Has Failed to Make AYP					
	1	2	3	4	5	6
Improvement plan		X	X	X	X	X
School choice		X	X	X	X	X
Supplemental services			X	X	X	X
Corrective action				X		
Restructuring plan					X	
Implement restructuring						X

- **IMPROVEMENT PLAN:** Must develop (or revise) a school improvement plan.
- **SCHOOL CHOICE:** Must offer school choice options, if possible, to parents of all children in the school failing to make AYP. (Districts are not required to provide school choice if there are no other schools in the district or if all the other schools have failed to make AYP for at least two years.)
- **SUPPLEMENTAL SERVICES:** Must offer supplemental educational services (such as tutoring) outside the school day to eligible children.
- **CORRECTIVE ACTION:** The school district must take at least one of the following actions: (1) replace staff who are relevant to the school's low performance, (2) implement a new curriculum, (3) significantly decrease management authority at the school level, (4) appoint an outside expert to advise the school, (5) extend the school's academic year or lengthen its school day, or (6) change the internal organizational structure of the school.
- **RESTRUCTURING:** In the fifth year of failing to make AYP, the school district must prepare a restructuring plan and arrange to implement it. NCLB outlines various restructuring options, including: (1) reopen the school as a charter school, (2) replace staff who are relevant to the school's low performance, (3) contract with another entity (such as a private management company) to operate the school, (4) turn the operation of the school over to the state department of education, or (5) enter into other major restructuring arrangements. If the school fails to make AYP for a sixth year, the district must implement the plan.

SOURCE: No Child Left Behind Act, §1116.

NCLB also requires that all teachers of core academic subjects be considered "highly qualified" by the end of the 2005-06 school year. In general a "highly qualified teacher" is one with full certification, a bachelor's degree and demonstrated competence in subject knowledge and teaching. Core subjects include English, reading or language arts, mathematics, science, foreign languages, civics and government, economics, arts, history and geography. The Act also required paraprofessionals to be highly qualified by January 2006. If a paraprofessional is allowed to provide instructional support, they must have at least an associate's degree or two years of college (a minimum of 48 college credits), or they must meet a rigorous standard of quality through a formal state assessment. If a paraprofessional's role does not involve facilitating instruction--such as serving as a hall monitor--that person does not have to meet the same academic requirements. While NCLB requires teachers and paraprofessionals to be highly qualified by a specified time period, there are no sanctions mandated for a school, an LEA, or a state if these requirements are not met. The percentage of highly qualified teachers teaching core subjects must be determined and reported as part of the report card. For further details on teacher or paraprofessional qualifications see Appendix A and B, respectively.

## *Comparing to Other States*

One of the four basic reform principles identified at the beginning of this section was to provide increased flexibility and local control. This flexibility is clearly evident when you examine the various ways the states have designed their accountability systems to implement NCLB. This flexibility is also what makes comparing one state to another state extremely difficult. The choices that have been made by each state impact the costs incurred, achievement attained and progress towards NCLB goals of each state. States have always had and continue to have at their discretion the determination of their content and achievement standards and the design of their assessments. States also establish proficiency levels based on results of taking the assessments.

Other areas where states have exercised this flexibility are:

- ? States establish what constitutes a subgroup size. Montana and North Dakota set theirs at zero and then use a confidence interval. Maryland uses five as a subgroup size along with a confidence interval. Virginia uses 50 as their subgroup size. Some states set a different subgroup size for special education children than what is used for non special education children subgroups.
- ? Some states use a confidence interval while others do not. SD and Arizona use 99%, Maine uses 95%, Iowa uses 90%, and Minnesota uses a sliding scale of 95-99%.
- ? States establish AMOs and the timelines to achieve intermediate goals. Some states are more aggressive in the second half of the timeframe like SD, Texas and Ohio, while others spread the achievement out in equal annual increases like Washington, and yet others have an increase in 2005 and then another in 2007 and then an annual increase until 2014, like Illinois.
- ? States establish the starting points and AMOs for each grade span and these can be different for each grade span.
- ? States have flexibility in determining how many years of data to use in determining AYP. SD, Alabama and Tennessee are examples of states that use a uniform averaging procedure.
- ? States establish what constitutes other academic indicators. SD uses graduation rates and attendance rates but other states can and do use retention rates, achievement scores in writing, achievement scores in science, achievement scores in social studies. In Georgia, schools can pick from a menu of allowable indicators.

## **Specific Aspects of South Dakota's Accountability Plan**

### *Back loading AMOs*

In SD we have established our AMOs in such a way that they are back loaded. That is to say that the AMO increases in the final four years (2011-2014) are approximately twice the increase of the first eight years (2003-2010). This has the effect of making it easier for schools to make AYP for the next several years than it would have been if SD had chosen to increase AMOs at an equal rate each year. Since the NCLB Act itself is set to expire in 2008, SD has effectively delayed the impact of NCLB's 100% proficiency goal until after the Act would have to be reauthorized. As mentioned previously, SD is not the only state to have done this and we are not saying there is anything wrong with what SD has done. Rather we just point out that there are many things to occur legislatively and politically before SD will have to make the largest, and arguably the hardest to achieve, gains in student proficiency.

### *Use of the Confidence Interval and Small Test Group Sizes*

Many states have established a minimum subgroup size for assessing and reporting results. In many states this was set to 30 or 40. In SD with our numerous small schools, the use of such a subgroup size would have resulted in a significant number of schools being not assessable using test results. In these cases, an alternate method would have to be used to determine AYP. In SD this method is called the “small school audit” which involves a review of additional academic data.

To reduce the number of schools subject to the small school audit and to reduce the likelihood of identifying a school as not meeting the AMO when in fact it did, SD established its accountability plan using a minimum subgroup size of 10 along with a confidence interval for reporting and accountability purposes.

The use of a confidence interval is a statistical concept and a detailed discussion of its usage and merits is beyond the scope of this report. In brief, SD starts from the hypothesis that all schools met the AMO. It is then up to the test results to prove otherwise.

The confidence interval is applied to the actual percentage of proficient/advanced students in a subgroup. If the AMO is within the pass rate including the confidence interval, the subgroup met the AMO even though the actual pass rate for the subgroup may have been below the AMO. In SD, the confidence interval is based on 99%.

For example, for 2004 the AMO for elementary math was 45%. Using the confidence interval allows a subgroup of 10 to meet the AMO with only 1 passer (10% pass rate). A subgroup of 20 would require 4 passers (20% pass rate) to meet the AMO and a subgroup of 100 would require 33 passers (33% pass rate) to meet the AMO. As can be seen, as the subgroup size increases, the percentage of students that must pass from that subgroup increases if the subgroup is to meet the AMO. The drawback of this use of the confidence interval is that for the smallest of the subgroups, the risk of accepting a subgroup as meeting the AMO when in fact it did not is actually quite high. It is also interesting to note that while a subgroup of 10 with no passers would fail meeting the AMO, a subgroup of 9 with no passers would not be considered as failing the AMO because the subgroup size is less than 10 and therefore would not be held accountable.

As previously stated, SD has established a minimum subgroup size of 10 for reporting in order to maintain the confidentiality of the test takers and to reduce the number of schools that would require alternate assessment by receiving a small school audit. While the use of the confidence interval and the minimum subgroup size make sense from statistical and practical standpoints, they do produce some interesting outcomes when you look at actual testing results as discussed in the following paragraphs.

A factor affecting the subgroup size is the number of grades assessed in a school. Elementary schools tend to have the most grades tested with grades 3-5 and sometimes grade 6 being tested; middle schools follow closely with grades 6-8 or grades 7-8 being most common. High schools however are assessed only on the 11<sup>th</sup> grade. Because of the number of small high schools in SD, the minimum subgroup size of 10 precludes many subgroups from being assessed even though a number of those subgroups contain students. The following Table 2.4 provides a frequency distribution of the number of special education students tested for math in 2004 by school type.

**Table 2.4: 2004 Math Assessment  
Special Education Subgroup**

Number of Students Tested	Number of Schools		
	High Schools	Middle Schools	Elementary Schools
0	34	14	51
1-2	68	33	49
3-5	41	45	50
6-9	12	36	39
10-20	10	23	94
21-50	5	21	55
51-100	0	17	4
101-over	0	0	0
<b>Totals</b>	<b>170</b>	<b>189</b>	<b>342</b>

Source: Legislative Audit compilation of  
SDDOE supplied data.

As the table 2.4 shows, only 15 high schools had a sufficient number of special education students tested to allow that subgroup to be evaluated based on test results. When one considers that for the 2004 math test, 10 of 17 (59%) high schools, 34 of 46 (74%) middle schools and 26 of 56 (46%) elementary schools failed to meet the AMO solely because of the special education subgroup, it comes as no surprise that the high schools in need of improvement list is dominated by large high schools. It is not that the other schools do not have students in the subgroup; it is just that they do not have a sufficient number of students for their test results to be reported. In fact, across all school types, 602 of 701 (86%) schools had at least one student in the special education subgroup, but only 229 of these 602 (38%) schools had 10 or more in the subgroup. In total, 7,004 special education students were tested for math in 2004 and 5,618 were in schools where the subgroup was 10 or larger. This leaves 1,386 special education students in 373 schools that were in subgroups too small to be held accountable. (See Appendix C for table showing AYP determinations by school type, subject and subgroup.) According to the SDDOE, only 18 schools will be receiving a small school audit in the coming year.

Going forward, increases in the AMO and the use of the confidence interval will affect the number of students that must pass at a greater rate than the increase in the AMO. For example, in 2011 when the AMO for elementary math has risen from 45% to 73% (a 62% increase), a subgroup of 10 that in 2004 only needed 1 passer to meet AMO will need 4 passers (40%) or a four fold increase to meet the AMO. Comparatively, a subgroup of 100 which required 33 passers in 2004 will need 63 (63%) passers or approximately a two fold increase to meet the AMO. (See table on page 7 for the annual incremental increases in AMO.)

Because of the back loading of the AMOs, the subgroup minimum size of 10 and the confidence interval, the risk of small schools and particularly small high schools, being added to the in need of improvement list is much lower than for the larger middle and high schools. This will change somewhat as the AMOs begin to approach the ultimate goal of 100%. However, as stated earlier, the NCLB Act itself expires in 2008 and much can happen between now and then.

It is important to note here that the SDDOE by establishing the minimum subgroup size of 10 and using the confidence interval has minimized the risk that a school would be identified as in need of improvement when in fact it is not. By establishing the back loaded AMOs, the SDDOE has significantly delayed the potential punitive effects of NCLB for a majority of SD's schools. Considering the small size of a majority of SD's schools and the subgroups within those schools and the fact that NCLB's assessment requirements rely almost entirely on the results of a single test each year from these small groups, these decisions by the SDDOE seem to have been prudent.

